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March 31, 2004

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> 22387 U.S. PTO 10/815264

ATTORNEY DOCKET NO.: INTEL1450 (P18517)

ATTN: MAIL STOP PATENT APPLICATION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Transmitted herewith for filing is the <u>new</u> Utility patent application of:

APPLICANTS: NARAYANAN SUNDARARAJAN; LEI SUN; YUEGANG ZHANG;

XING SU; SELENA CHAN; TAE-WOONG and ANDREW A. BERLIN

TITLE: MICROFLUIDIC APPARATUS, SYSTEMS, AND METHODS FOR

PERFORMING MOLECULAR REACTIONS

Enclosed are the following papers, including all those required to receive a filing date under 37 CFR § 1.53(b):

Number of Pages

Specification	42.
Claims	5
Abstract	1
Declaration [unsigned]	8
Drawing(s) – [formal]	6

"EXPRESS MAIL" Mailing Label Number: EV 318 738 483 US Date of Deposit: March 31, 2004

I hereby certify under 37 CFR§ 1.10 that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office To Addressee" with sufficient postage on the date indicated above and is addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-

1450.

Jason Berry

GRAY CARY WARE & FREIDENRICH LLP

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Enclosure(s):

- Application Data Sheet (5 pages)
- Preliminary Amendment (6 pages)
- Check No.: 556812 in the amount of \$770.00
- Return Receipt Postcard

Applicant(s) claim LARGE ENTITY status in the above-identified application.

The filing fee is calculated as follows:

	Number Filed		Number Extra		Rate			Fee	
					Large Entity	Small Entity		Large Entity	Small Entity
Total Claims	20-20	=	0	х	\$18	\$09	=	\$ 0.00	\$ 0.00
Independent Claims	3-3	=	0	Х	\$86	\$43	=	\$ 0.00	\$ 0.00
Multiple Dependent Claims Presented: Yes X No				\$280	\$140		\$ 0.00	\$ 0.00	
				BASIC FEE			\$770.00	\$385.00	
					TOTAL FEE			\$770.00	\$ 0.00

Check No. 556812 in the amount of \$770.00 is enclosed as payment of the **FILING FEE**. The Commissioner is hereby authorized to apply any other required fees or any credits to Deposit Account No. 50-1355, referencing the attorney docket number shown above. A copy of this Transmittal Sheet is enclosed.

GRAY CARY WARE & FREIDENRICH LLP

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If this application is found to be INCOMPLETE, or if a telephone conference would otherwise be helpful, please call the undersigned at (858) 677-1456.

A duplicate copy of this letter is enclosed. Kindly acknowledge receipt of this application by returning the enclosed postcard.

All future correspondence should be addressed to:

Lisa A. Haile, J.D., Ph.D.
GRAY CARY WARE & FREIDENRICH LLP

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USPTO Customer Number 28213

Respectfully submitted,

GRAY CARY WARE & FREIDENRICH LLP

Lisa A. Haile, J.D., Ph.D.

Registration No. 38,347

March 31, 2004

Date

LAH/EJV/kdl Enclosures